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RÉMARKS / DISCUSSION OF ISSUES

Claims 1-12 are pending in the application.

The Office action indicates that claims 3 and 4 would be allowable if rewritten in independent form. Claim 3, upon which claim 4 depends, is rewritten herein in independent form. The scope of claims 3 and 4 remain unchanged, and no new matter is added.

The Office action rejects claims 1, 5, and 8-9 under 35 U.S.C. 103(a) over Endo (USP 6,363,491) and 2findit ("RE: USB Problems" in ISPnews[online].alt.sys.pc-clone.dell newsgroup, January 7, 1999). The applicants respectfully traverse this rejection.

Claim 1, upon which claims 5 and 8 depend, claims a device with a control circuit that initiates operation of the device in either a slave mode or a stand-alone mode dependent upon whether power is detected on a bus. Claim 9 claims a USB apparatus that includes a controller that determines whether power is being provided to the apparatus via a USB bus, and places the USB apparatus in a slave mode if the power is being provided to the apparatus via the USB bus, and places the USB apparatus in a stand-alone mode if power is not being provided to the apparatus via the USB bus.

As noted in the applicants' prior response, Endo teaches a USB hub apparatus that detects whether power is being provided on a bus by a host computer, and subsequently reduces or terminates power to USB devices connected to the hub so that they consume less power than a sleep-mode state when power is not provided by the host computer. The applicants respectfully maintain that Endo teaches directly against the applicants' invention by teaching that devices should be effectively turned off when they do not receive power from the bus, whereas the applicants teach that the device should continue to operate in a stand-alone mode.

2findit discloses a "help file" for the Altec Lansing ACS 495 speakers, wherein it is stated that when the speakers are disconnected from the USB cable, they

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operate in a stand-alone mode. No details are provided regarding the embodiment. Attached is a copy of an e-mail from Altec Lansing, dated 10 January 2002, that provides additional information. As stated by Altec Lansing: "These speakers require no special drivers or software to work properly... The USB cable just allows you to use the AMS software. This software gives you some control over some of the sound features. The same functionality of the AMS software can be gotten by using the buttons on the speakers and the volume control software that comes with your Windows system."

The applicants respectfully maintain that there is no suggestion in the information provided by the manufacturer of the ACS 495 speakers that these speakers are configured to monitor whether or not power is being provided by the USB bus. That is, USB controls and the buttons on the speakers may merely operate in parallel. As specifically noted in the referenced "help file", the speakers also operate in a stand alone mode when the ACS 495 program is removed, which would not affect the power being provided by the USB bus. Because the absence of a software program allows the speakers to operate in the stand alone mode, the applicants respectfully maintain that the stand alone mode of the ACS 495 appears to be independent of whether power is applied to the USB bus, and the Office action provides no evidence to the contrary.

Further, because Endo teaches to power-down devices when the USB bus power is removed, the applicants respectfully maintain that a combination of Endo and 2findit would not be suggested to one of ordinary skill in the art. Further, because 2findit provides a stand-alone mode that is apparently independent of the power provided by the USB bus, the applicants respectfully maintain that adding the complexity of Endo to the device of 2findit would not be suggested to one of ordinary skill in the art.

Because neither Endo nor 2findit, individually or collectively, teach or suggest operating a device in slave mode when power is being provided by a bus, and operating the device in a stand-alone mode when power is not being provided by the bus, and because Endo effectively teaches against providing operational power to a device when power is not being provided by the bus, the applicants respectfully

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request the Examiner's reconsideration of the rejection of claims 1, 5, and 8-9 under 35 U.S.C. 103(a) over Endo and 2findit.

The Office action rejects claims 2, 6, and 10-12 under 35 U.S.C. 103(a) over Endo, 2findit, and Tsai et al. (USP 6,101,076, hereinafter Tsai). The applicants respectfully traverse this rejection, based on the remarks above regarding claims 1 and 9, upon which each of these rejected claims depend, and based on the following remarks.

The Office action asserts that Endo "discloses each and every limitation of the claims ... except for the details of the pull circuit". As noted above, Endo effectively teaches against the applicants' claimed invention by teaching that devices should be powered-down when the USB bus power is removed, whereas the applicants teach that the device should continue to operate.

The Office action notes that Tsai teaches a device with a pull circuit, and asserts that one of ordinary skill in the art would be motivated to combine Endo and Tsai, as the combination "provides real-time information that would be of value in resource monitoring environments". The applicants respectfully disagree with this asserted combination, because it is unclear what real-time information would be provided by embodying Tsai's invention in Endo's hub, and, more importantly, whether such a combination would perform its intended function.

Tsai teaches a technique for recovering from electromagnetic interference. As is known in the art, EMS (electromagnetic safety) standards require that devices automatically recover from given levels of EM interference. The USB port automatically disconnects a USB device whenever the device fails to transmit data properly for a given number of tries, and thus USB devices often fail EMS tests (Tsai, column 1, line 65 through column 2, line 20). Tsai teaches automatically pulling the data line low, then high, to simulate a disconnection and reconnection of a USB device from the bus whenever a high level of EMS interference is detected.

Endo's invention is designed to be embodied in a USB hub; Tsal's invention is designed to be embodied in a USB device/apparatus. The USB hub of Endo provides power to multiple USB devices, and allows data to be transferred from a host to these

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multiple USB devices. Of particular significance, there is no indication in Endo as to the affects produced by pulling the data line low and then high at the USB hub, because generally, the USB devices control the voltages on the data lines, and not the USB hub. The applicants respectfully maintain that a combination of Endo and Tsai would produce indeterminate results and likely render the combination unsuitable for its intended purpose.

Further, the applicants specifically claim that the controller of the pull-circuit is dependent upon whether power is provided by the bus system, whereas Tsai specifically teaches that the pull-circuit is controlled by the amount of EM interference on the data lines.

Because Endo effectively teaches against the applicants' invention, and because a combination of Endo and Tsai is likely to render the combination unsuitable for its intended purpose, and because neither Endo nor Tsai, individually or collectively, teach or suggest controlling a pull-circuit based on whether power is being provided by a bus system, the applicants respectfully request the Examiner's reconsideration of the rejection of claims 2, 6, and 10-12 under 35 U.S.C. 103(a) over Endo, 2findit, and Tsai.

In view of the foregoing, the applicants respectfully request that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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Reg. 41,508

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Windows XP

E-mail from Altee Lansing (10 January 2002) explaining how to use the ACS 495 speakers with Windows XP:

"These speakers require no special drivers or software to work properly.

At the current time we do not have AMS software or an USB audio device driver compatible with Windows XP. There are no plans at this time to develop this software.

Your speakers will work with Windows XP. Just make sure you use the audio cable from the back of the subwoofer to the audio or sound out port of your sound card. Do not use the USB cable.

Sound does not come through the USB port The USB cable just allows you to use the AMS software. This software gives you some control over some of the sound features. The same functionality of the AMS software can be gotten by using the buttons on the speakers and the volume control software that comes with your Windows system. If you double click the speaker icon from the system tray, that will open this software up.

With the USB connector removed or the computer turned off, STEREO or PRO LOGIC modes can be selected by depressing and holding the center control down for approximately three seconds. The mode selected will be indicated by the color of the LED on the front right speaker. When the light glows yellow it is in the STEREO mode. When the light is green it is in the PRO LOGIC mode."

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Download

The Altec Lansing ACS 495 audio driver can be downloaded here: 495 W98.EXE.

Last updated: 2 May 2004.

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